

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 (Currently amended): A method of managing a repository containing multiple versions of ~~an object~~, objects, the method being performed by a computer, the method comprising:

establishing a plurality of configurations in a memory, each configuration containing no more than one version of an object; and

associating in said memory no more than one configuration with a workspace in another computer from which a query can be issued.

2 (Currently amended): ~~The method of Claim 1 further comprising,~~

A method of managing a repository containing multiple versions of objects, the method being performed by a computer, the method comprising:

establishing a plurality of configurations in a memory, each configuration containing no more than one version of an object in said repository;

associating in said memory no more than one configuration with a workspace from which a query can be issued; and

in response to receipt of the query:

retrieving an identity of the configuration directly from the workspace from which the query originates;

determining a version of each object to be included in a response to the query, based on the identity of the configuration; and

presenting the outside said computer, said response including the version of the object determined based on the configuration identity, without exposing any information related to versioning of the object.

3 (Currently amended): ~~The method of Claim 1~~

A method of managing a repository containing multiple versions of objects, the method being performed by a computer, the method comprising:

establishing a plurality of configurations in a memory, each configuration containing no more than one version of an object in said repository;

associating in said memory no more than one configuration with a workspace from which a query can be issued; and

wherein said plurality of configurations comprises at least a design time configuration and a run time configuration; ~~the method further comprising:~~

associating in said memory the design time configuration with each of a plurality of persons involved in designing the said repository; and

associating in said memory the run time configuration with each of a plurality of software application programs that use the repository during live operation.

4 (currently amended): A ~~computer-readable storage medium~~ device encoded with the repository and with a sequence of instructions to perform the acts of Claim 1.

Claim 5 (canceled).

6 (Currently amended): A computer comprising:

a storage medium comprising a repository containing multiple versions of ~~an object~~;
objects;

means, coupled to the storage medium, for establishing a plurality of configurations,
each configuration containing no more than one version of an object; and

means, coupled to the establishing means and coupled to the storage medium, for
associating in a memory only one configuration with a workspace of a person who can
issue a query.

7 (Currently amended): ~~The method of Claim 1 further comprising~~ A method of
managing a repository containing multiple versions of objects, the method being performed
by a computer, the method comprising:

establishing a plurality of configurations, each configuration containing no more than
one version of an object;

associating no more than one configuration with a workspace from which a query
can be issued;

receiving an instruction to insert a first object into said repository, and in response to
said receiving of said instruction checking if the first object is contained in another object,
and if not performing acts (a) and (b) else performing act (c):

(a) inserting into a first table in a memory of said computer, a first row comprising a
plurality of values that define the first object, a unique identifier of the first object, and a
version number of the first object; and

(b) inserting into a second table in said memory, a second row comprising the
unique identifier of the first object, the version number of the first object, and an identifier of
a current configuration as identified by a workspace from which said instruction is received;

wherein acts (a) and (b) are performed in any order relative to one another, and alternatively

(c) inserting into a third table in said memory, a third row comprising a plurality of values that define the first object, a unique identifier of the first object, and at least a current version number of a second object which contains the first object, the second object being not contained in any other object.

8 (Original): The method of Claim 7 wherein a third object is located between the first object and the second object, and the first object is indirectly contained in the second object, via the third object.

9 (currently amended): The method of Claim 7 wherein the second table in said memory comprises a plurality of configurations including the current configuration, each configuration in said plurality of configurations containing no more than one version of the first object.

10 (Original): The method of Claim 7 further comprising if the first object is contained in the second object, storing in the third row in the third table of act (c) a maximum version number of the second object, the current version number being stored as a minimum version number of the second object.

11 (Original): The method of Claim 10 further comprising checking if the second object belongs to a configuration that has been deployed and if so:

in a fourth row which contains a most recent version of the first object in the third table to be used in act (c), set the maximum version number to be the current version number of the second object;

inserting into the first table, a fifth row for the second object, using a new version number obtained by incrementing the current version number of the second object;

using the new version number when performing act (c); and

inserting in the second table a sixth row containing the new version number of the second object and the identifier of the current configuration.

12 (Original): The method of Claim 7 further comprising receiving another instruction to update the first object, and checking if the first object is contained in any other object.

13 (Original): The method of Claim 12 further comprising, if the first object is not contained in any other object:

checking if the first object belongs to a configuration that has been deployed and if not deployed then updating a row in the first table that holds the first object, and if deployed then creating a new version of the first object in the first table.

14 (Original): The method of Claim 13 further comprising, if the first object is contained in the second object:

checking if the second object is deployed, and if deployed creating a new version of the second object.

15 (Original): The method of Claim 7 further comprising receiving another instruction to delete the first object, and checking if the first object is contained in any other object.

16 (currently amended): The method of Claim 15 further comprising, if the first object is not contained in any other object:

checking if the first object belongs to a configuration that has been deployed and if not deployed then deleting the first row in the first table; and

deleting the second row in the second table in said memory.

17 (Original): The method of Claim 15 further comprising, if the first object is contained in the second object:

checking if the second object is deployed, and if deployed creating a new version of the second object.

18 (Currently amended): A ~~computer-readable storage medium~~ device encoded with a ~~sequence~~ plurality of instructions to be executed by a computer, ~~to perform the acts of Claim 7~~ said plurality of instructions comprising:

instructions to establish a plurality of configurations, each configuration containing no more than one version of an object;

instructions to associate no more than one configuration with a workspace from which a query can be issued;

instructions to receive a first instruction to insert a first object into a repository, and instructions to respond to receipt of said first instruction by checking if the first object is contained in another object, and if not performing acts (a) and (b) else performing act (c):

(a) inserting into a first table in a memory, a first row comprising a plurality of values that define the first object, a unique identifier of the first object, and a version number of the first object; and

(b) inserting into a second table in said memory, a second row comprising the unique identifier of the first object, the version number of the first object, and an identifier of a current configuration as identified by a workspace from which said instruction is received;

wherein acts (a) and (b) are performed in any order relative to one another, and alternatively

(c) inserting into a third table in said memory, a third row comprising a plurality of values that define the first object, a unique identifier of the first object, and at least a current version number of a second object which contains the first object, the second object being not contained in any other object.

19 (Currently amended): The ~~computer-readable storage medium device~~ of Claim 18 further comprising the repository, ~~the repository comprising the third table, the third table comprising a first column for holding a maximum version number of the second object and a second column for holding a minimum version number of the second object, the current version number being stored in the second column.~~

Claim 20 (canceled).

21 (Currently amended): The computer of Claim 6 further comprising:

means, coupled to the storage medium, responsive to an instruction to insert the object, for checking if the object to be inserted is contained in another object and if so generating a second signal else generating a first signal;

means, coupled to the storage medium and to the means for checking, responsive to the first signal, for inserting into a table in said memory, a row comprising a plurality of values that define the object, a unique identifier of the object, and a version number of the object and inserting into another table, another row comprising the unique identifier of the object, the version number of the object, and an identifier of a current configuration as identified by a workspace from which said instruction is received by said means for checking; and

means, coupled to the storage medium and to the means for checking, responsive to the second signal, for inserting into yet another table in said memory, yet another row comprising a plurality of values that define the object, a unique identifier of the object, and at least a current version number of said another object in which the object is contained.